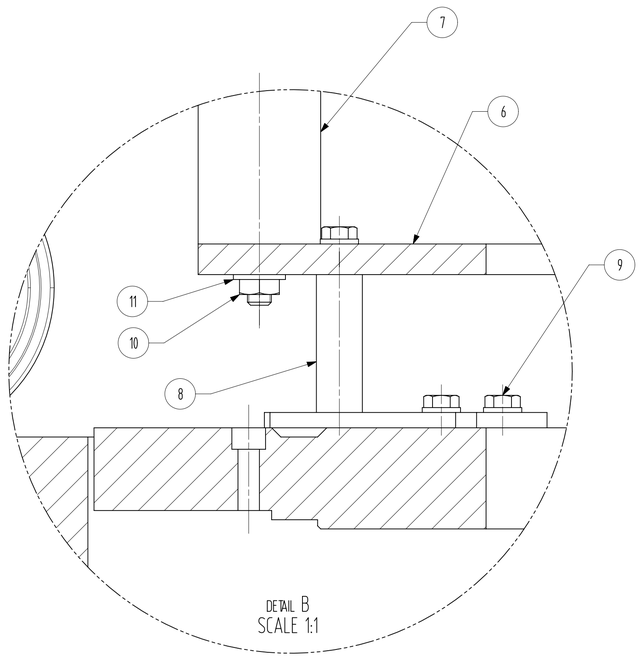
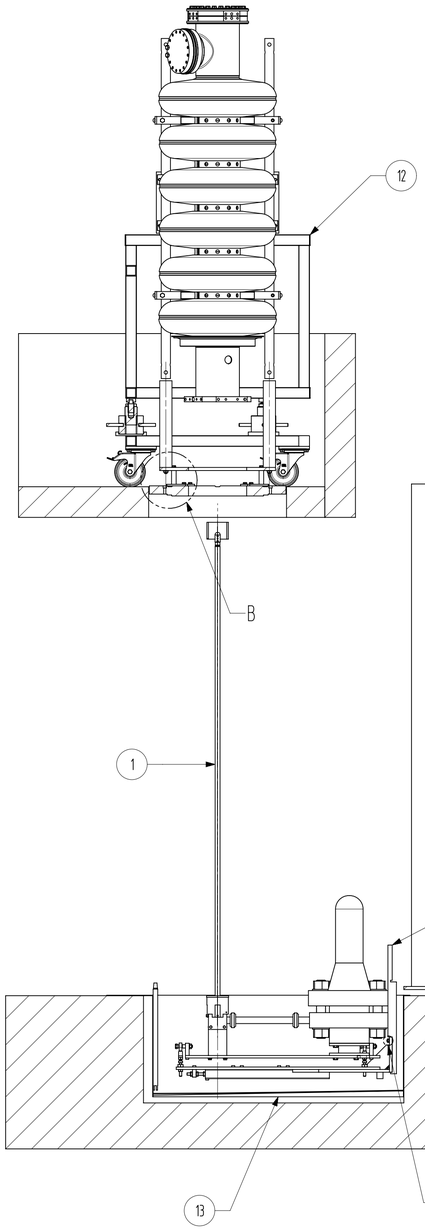
DESCRIZIONE, DISEGNI E SPECIFICHE PER MECCANICA SPECIALE DEDICATA AL LAVAGGIO E MOVIMENTAZIONE CAVITÀ SUPERCONDUTTIVE IN CAMERA BIANCA

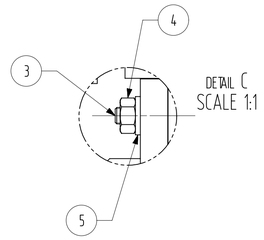
GENERAL TOLERANCES	-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6° -30°	30° -120°	120° -
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N-LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			



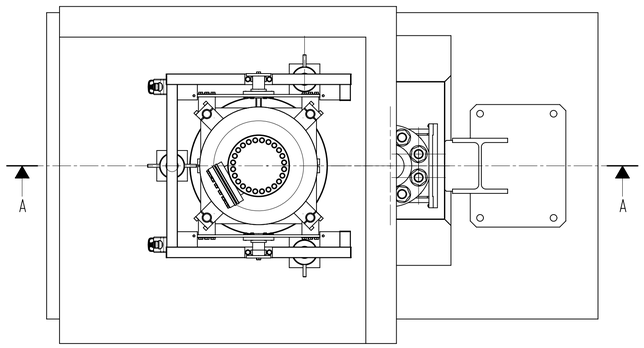
DETAIL B
SCALE 1:1

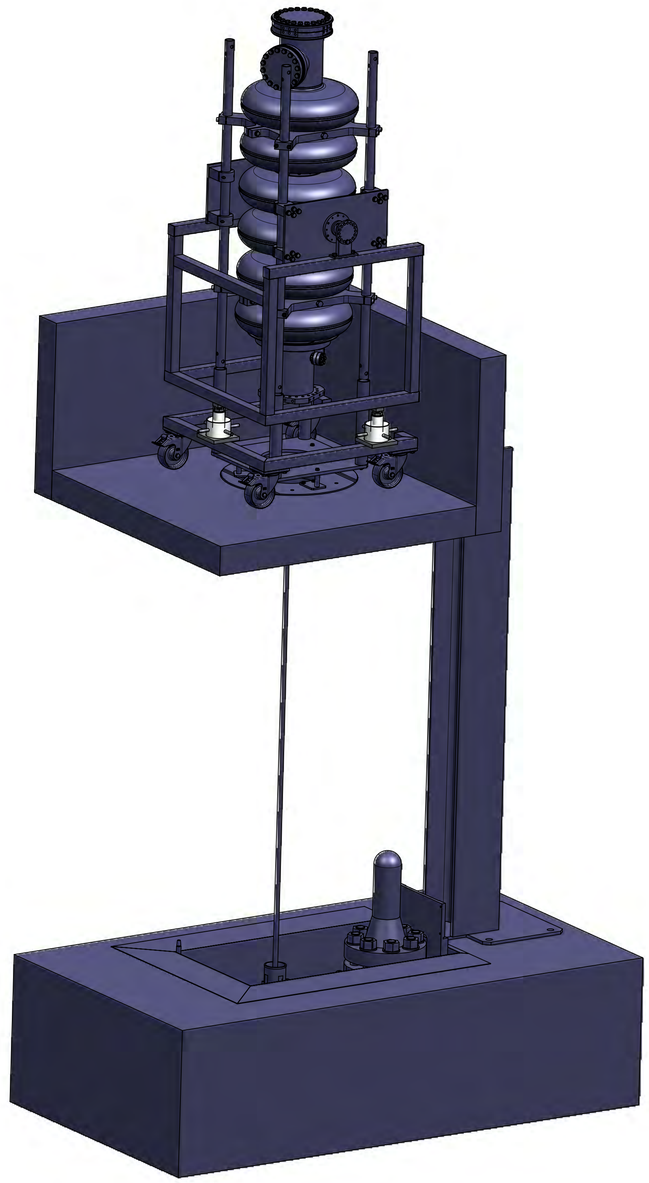


SECTION A-A



DETAIL C
SCALE 1:1





Pos.	Part Name	Qty	Material	Drawing	Note	Weight
13	Vasca	1	AISI-304		ESS-CB-01.04.00	
12	Carrello-CB	1			ESS-CB-01.03.00	
11	Rosetta-8.4x17-UNI-6592	4	A2			2
10	Nut M8 UNI-5588	4	A4			6
9	VTE-M6x0-UNI-5627	9	A2			0
8	Distanziale-giostra-ESS-MB	3	AISI-304		ESS-CB-01.02.02	230
7	Bicchierino-cavita-ESS-MB	4	AISI-304		ESS-CB-01.02.02	2733
6	Piastra-cavita-ESS-MB	1	AISI-304		ESS-CB-01.02.02	8916
5	Rosetta-6.4x12.5-UNI-6592	13	A2			1
4	Nut M6 UNI-5588	4	A4			3
3	VTCEI-M6x25-UNI-5931	4	A2			7
2	Prolunga-slitta	1	Anticorodal		ESS-CB-01.02.01	4815
1	Assy-Canna	1			ESS-CB-01.01.00	

INFN Istituto Nazionale di Fisica Nucleare	INFN Milano - LASA via Fratelli Cervi, 201 20090 Segrate (MI)	Size: A1	DWG: DWG-ASSY-Capannone ESS-CB-01.00.00	Revision: 0
		Drawn by: M. Bonezzi	Date: 2016/04/12	Sheet 1 of 1
Experience: ESS		Checked by:	Scale: 1 : 5	
Object: HPR-CB		Approved by: P. Michelato	Units: mm	
3D part: ASSY-Capannone		File name: R:\Project\HPR\Capannone\DWG-Assy-Capannone.prt		

Vasca in acciaio inossidabile per sistema HPR

Si richiede la quotazione per la realizzazione delle parti di seguito descritte

La vasca viene utilizzata per ricoprire una buca che verrà fatta su una pavimentazione in cemento, quindi è possibile che le misure possano variare di qualche centimetro, le dimensioni per la realizzazione saranno disponibili dopo la verifica delle dimensioni effettive della buca.

Dis. N°

ESS-CB-01.00.00 (Complessivo)

ESS-CB-01.04.00 (particolari)

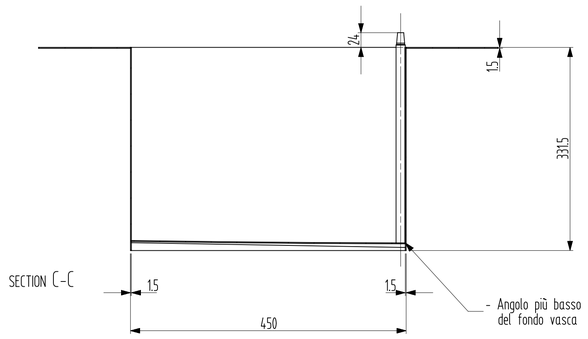
Descrizione:

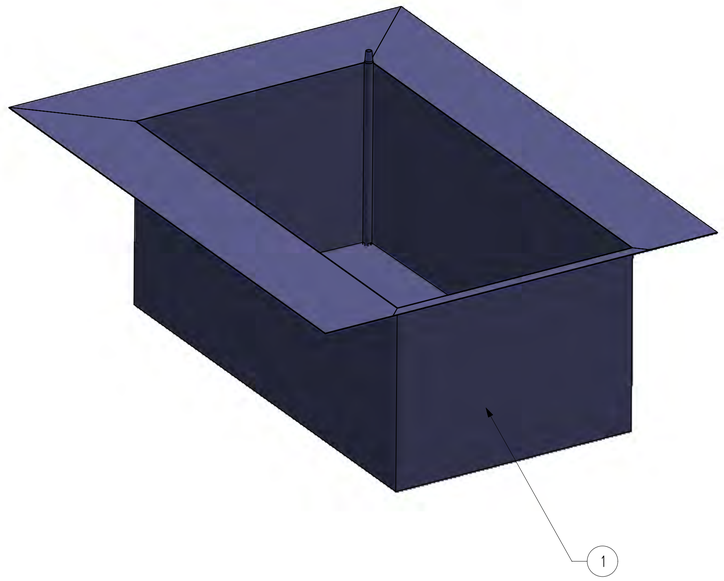
Vasca saldata a tenuta stagna con fondo inclinato in 2 direzioni

Canna di pescaggio saldata

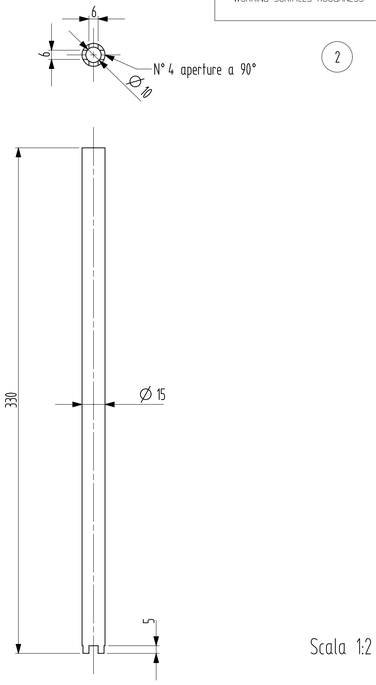
- Fondo della vasca inclinato in due direzioni dislivello 10-15 mm

- Saldare a filo, il fondo della vasca deve essere a tenuta stagna



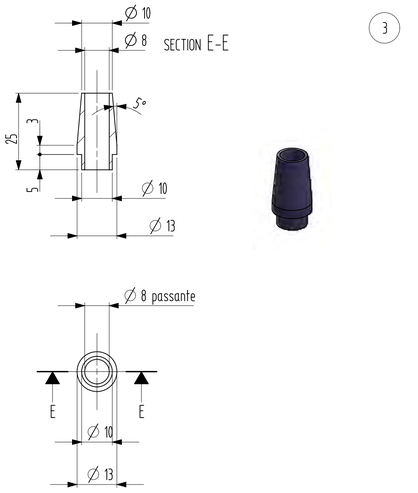


GENERAL TOLERANCES	-30	30-120	120-315	315-1.000	1.000-2.000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6° -30°	30° -120°	120° -
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			



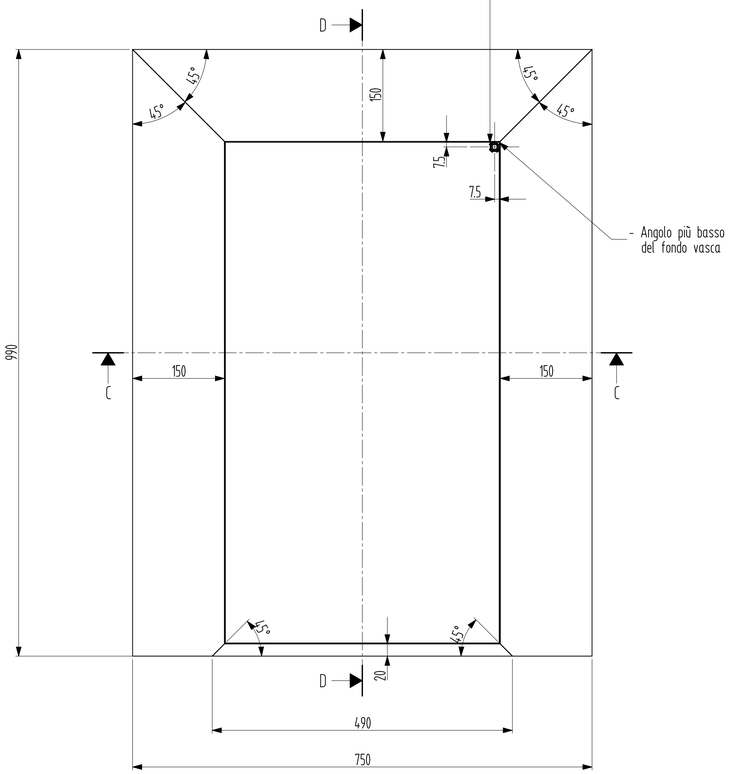
2

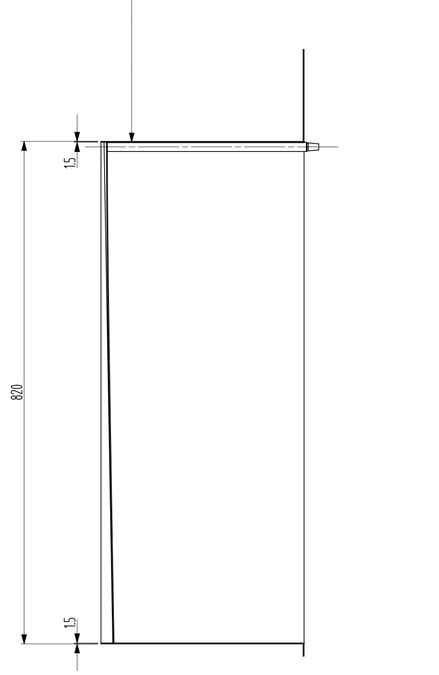
Scala 1:2



3

Scala 1:1

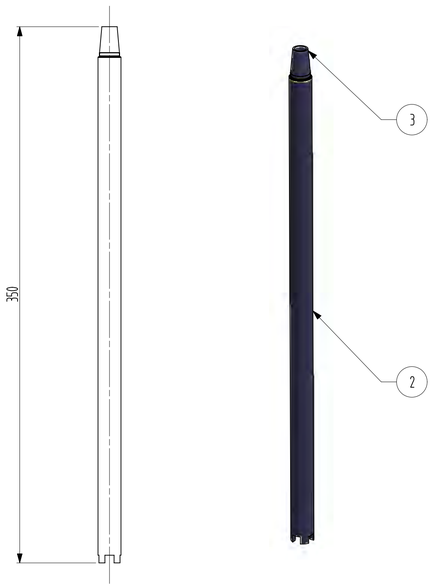




SECTION D-D

1

Scala 1:5



Pos.	Part Name	Qty	Material	Drawing	Note	Weight
3	Stringigamma	1	AISI 304			
2	Canna	1	AISI 304			
1	Vasca	1	AISI 304			

INFN Istituto Nazionale di Fisica Nucleare — INFN Milano - LASA via Fratelli Cervi, 201 20090 Segrate (MI)	Size: A1	DWG: DWG-Vasca ESS-CB-01.04.00	Revision: 0
	Drawn by: M. Chiodini	Date: 2016/04/19	Sheet 1 of 1
Experience: ESS	Checked by:	Scale: 1:5 1:2 1:1	
Object: Vasca	Approved by: P. Michelato	Units: mm	
3D part: Assy-Vasca	File name: R:\Projects\HPR\PDF-DWG-STEP\ESS-CB-01.04.00		

Sistema carrello di movimentazione cavità in camera bianca

Si richiede la quotazione per la realizzazione delle parti di seguito descritte

Dis. N°

ESS-CB-01.00.00 (Complessivo)

ESS-CB-01.03.00 (Complessivo parziale)

ESS-CB-01.03.01 (Particolari tutti)

ESS-CB-01.0302 (Particolari tutti)

ESS-CB-01.03.03 (Particolari tutti)

La fornitura deve comprendere anche le parti unificate indicate in tabella tutti (viti, rondelle, dadi ecc.)

Descrizione:

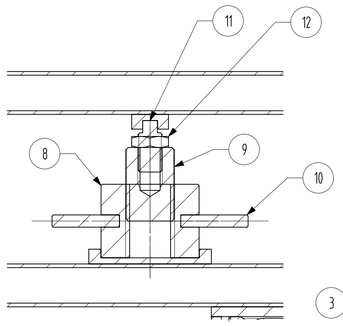
Carrello composto da tubolari saldati in AISI Elettrolucidati

Piastre e selle in AISI Elettrolucidati

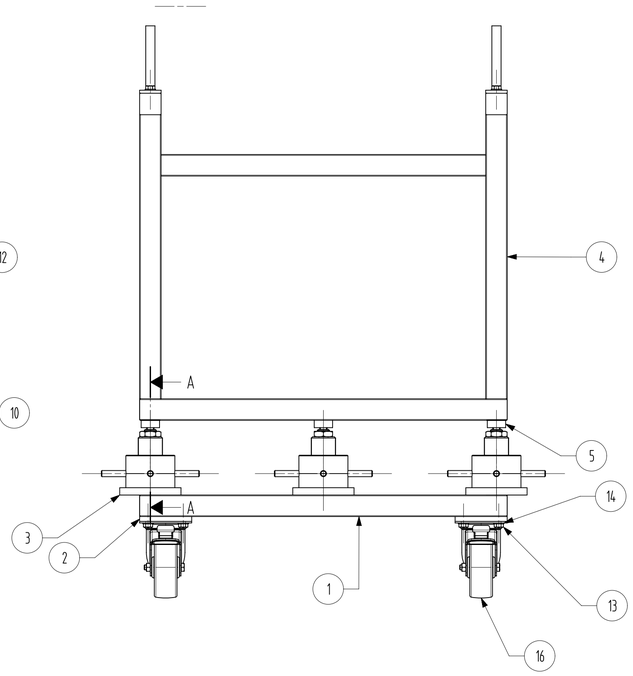
Tondi in AISI Elettrolucidati

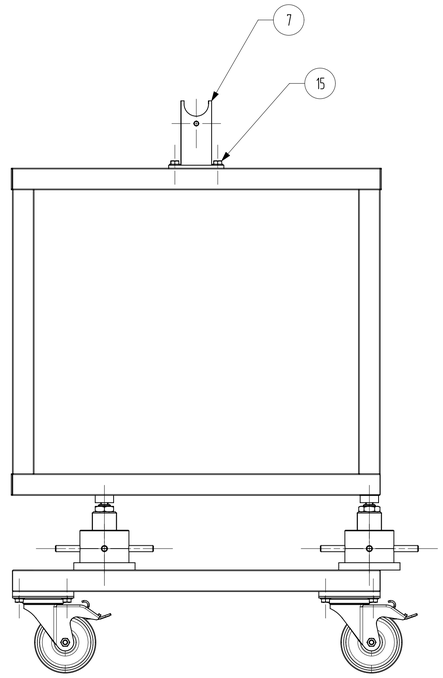
Vite e madrevite in teflon

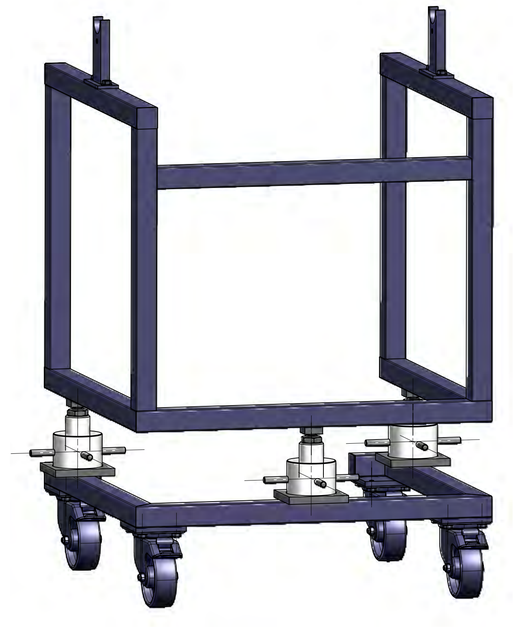
GENERAL TOLERANCES	-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6° -30°	30° -120°	120° -
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			

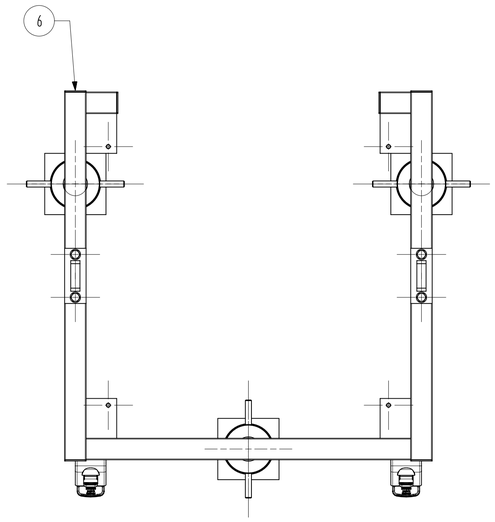


SECTION A-A







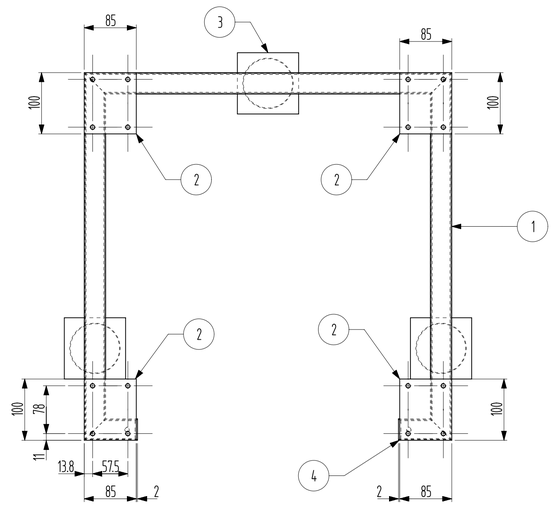


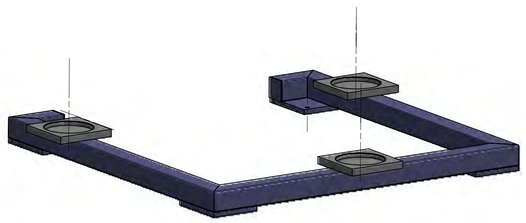
Pos.	Part Name	Qty	Material	Drawing	Note	Weight
16	Ruote-Blikle	4				
15	VTE-M8x16-UNI-5739	4	A2			0
14	Rosetta-8.4x17-UNI-6592	20	A2			2
13	VTE-M8x12-UNI-5627	16	A2			0
12	Dado-M20-UNI-5589	3	A2			38
11	Carrello-CB-MT-Perno	3	AISI-304	ESS-CB-03.00.03		87
10	Carrello-CB-MT-Razza	12	AISI-304	ESS-CB-03.00.03		34
9	Carrello-CB-MT-Vite	3	Teflon	ESS-CB-03.00.03		79
8	Carrello-CB-MT-Madrevite	3	Teflon	ESS-CB-03.00.03		293
7	Carrello-CB-Sella	2	AISI-304	ESS-CB-03.00.02		
6	Tappo-tubolare	8	AISI-304	ESS-CB-03.00.01/02		
5	Carrello-CB-Piastra-superiore-movimentazione	3	AISI-304	ESS-CB-03.00.02		76
4	Carrello-CB-Supporto-alto	1	AISI-304	ESS-CB-03.00.02		1743
3	Carrello-CB-Piastra-inferiore-movimentazione	3	Aisi-304	ESS-CB-03.00.01		660
2	Carrello-CB-Piastra-per-ruote	4	AISI-304	ESS-CB-03.00.01		523
1	Carrello-CB-Supporto-basso	1	AISI-304	ESS-CB-03.00.01		1690

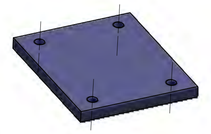
INFN Istituto Nazionale di Fisica Nucleare
INFN Milano - LASA
via Fratelli Cervi, 201
20090 Segrate (MI)

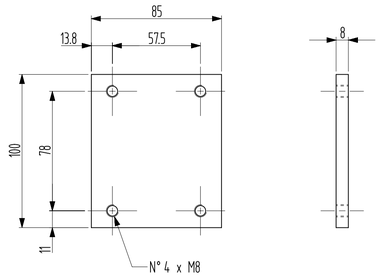
Size: A1
DWG: DWG1-ASSY-Carrello-CB
ESS-CB-01.03.00
Revision: 0
Drawn by: M. Bonezzi
Date: 2016/03/22
Sheet 1
Experience: ESS
Checked by:
Scale: 1:5-1:2.5
Object: Carrello-CB
Approved by: P. Michelato
Units: mm
3D part: ASSY-Carrello-CB
File name: R:/Project/HPRI/Carrello-CB/DWG1-ASSY-Carrello-CB.prt

GENERAL TOLERANCES	-30	30-120	120-315	315-1.000	1.000-2.000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6° -30°	30° -120°	120° -
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N-LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			

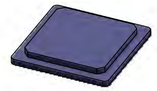


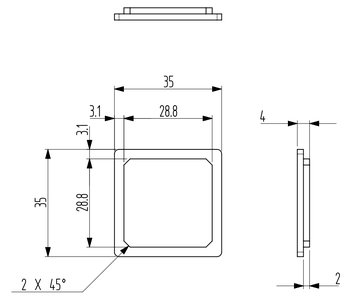




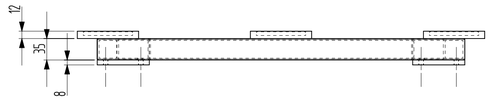


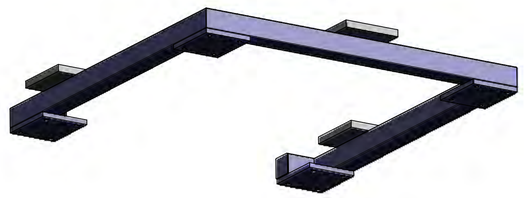
2

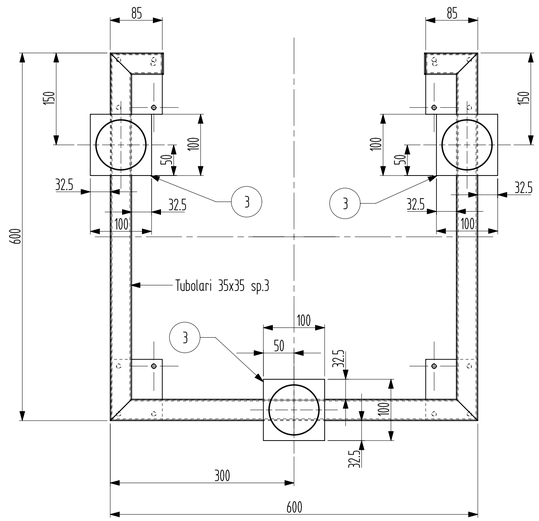




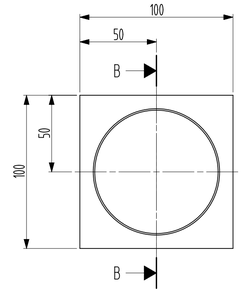
4

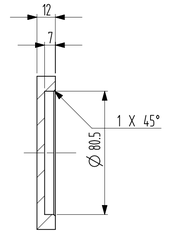




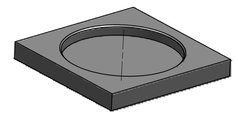


* Saldare i tubolari le piastre e i tappi a filo
* Non ci devono essere intercapedini
* Tutto Elettrolucidato





SECTION B-B



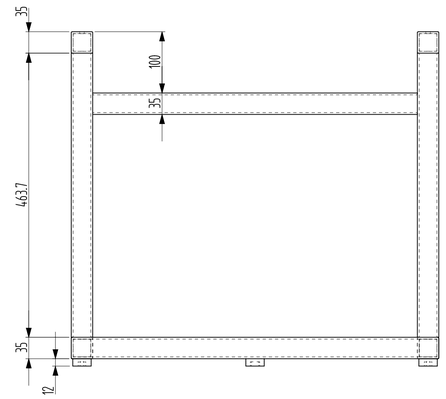
3

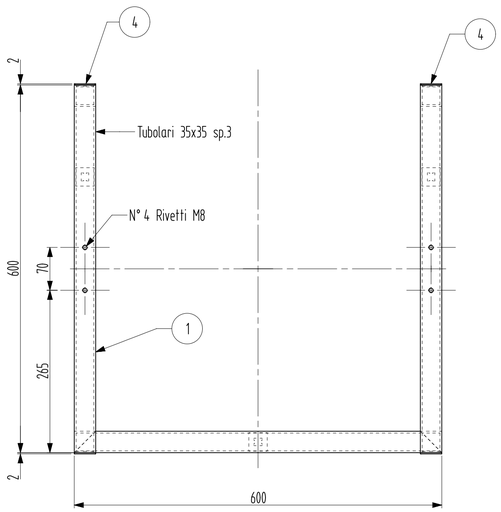
1.6

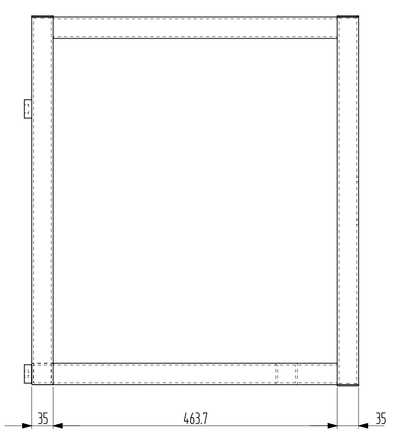
Smussi non indicati 0.3x45°

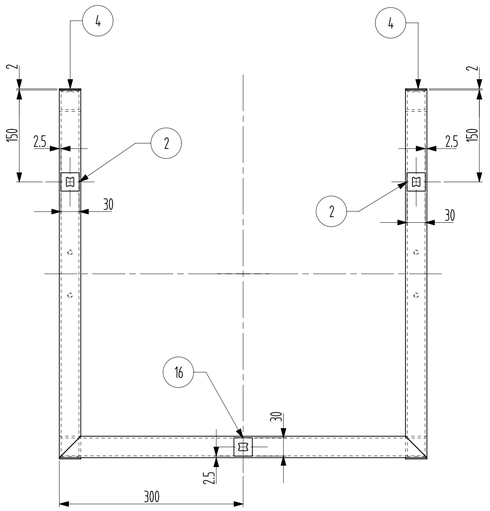
Pos.	Part Name	Qty	Material	Drawing	Note	Weight
4	Tappo-tubolare	2	AISI-304			
3	Carrello-CB-Piastra-inferiore-movimentazione	3	Aisi-304			660
2	Carrello-CB-Piastra-per-ruote	4	AISI-304			523
1	Carrello-CB-Supporto-basso	1	AISI-304			1690

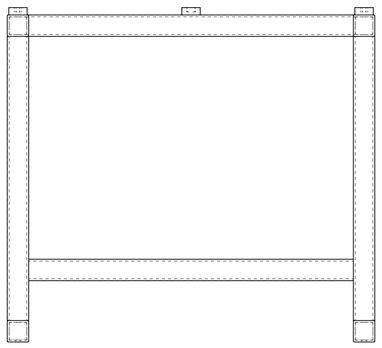
INFN Istituto Nazionale di Fisica Nucleare	INFN Milano - LASA via Fratelli Cervi, 201 20090 Segrate (MI)	Size: A1	DWG: DWG1-ASSY-Carrello-CB ESS-CB-01.03.01
		Revision: 0	
	Drawn by: M. Bonezzi	Date: 2016/03/23	Sheet 2
Experience: ESS	Checked by:	Scale: 1:5-1:2-1:1	
Object: Carrello-CB	Approved by: P. Michelato	Units: mm	
3D part: ASSY-Carrello-CB	File name: R:/Project/HPRI/Carrello-CB/DWG1-ASSY-Carrello-CB.prt		

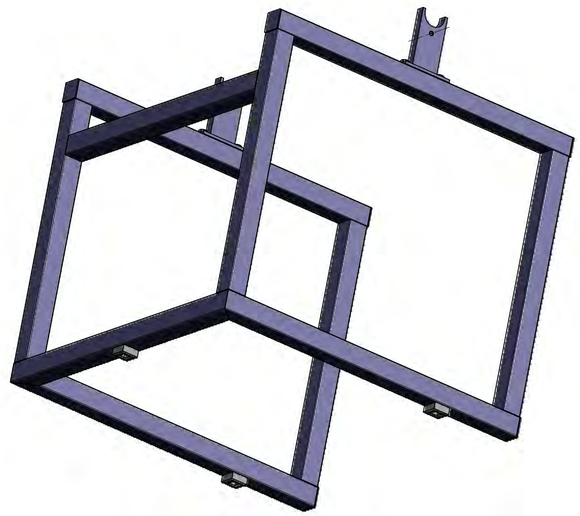


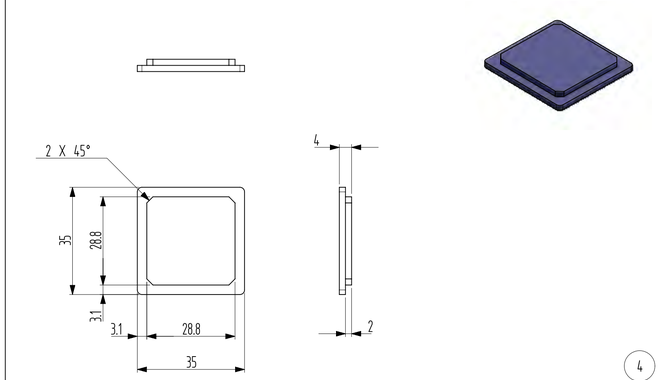


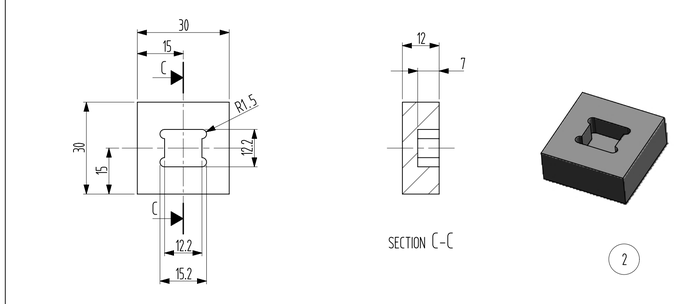


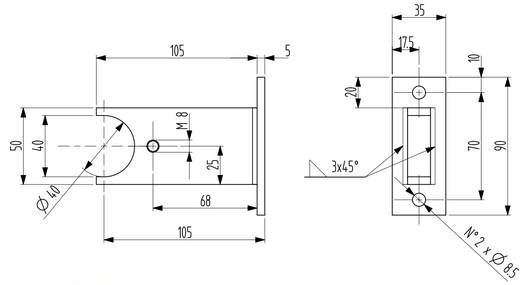












1.6

Smussi non indicati 0.3x45°

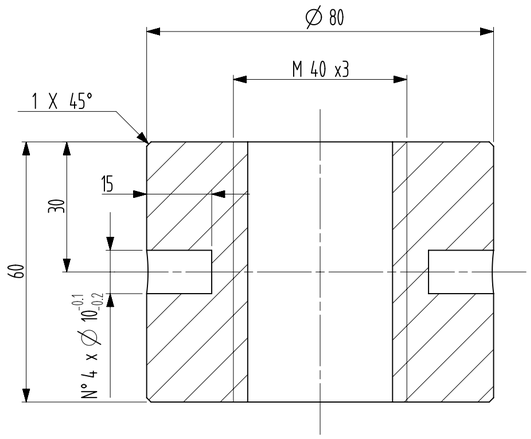
Pos.	Part Name	Qty	Material	Drawing	Note	Weight
4	Tappo-tubolare	6	AISI-304			
3	Carrello-CB-Sella	2	AISI-304			
2	Carrello-CB-Piastra-superiore-movimentazione	3	AISI-304			76
1	Carrello-CB-Supporto-alto	1	AISI-304			174.3

GENERAL TOLERANCES	-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6° -30°	30° -120°	120° -
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			

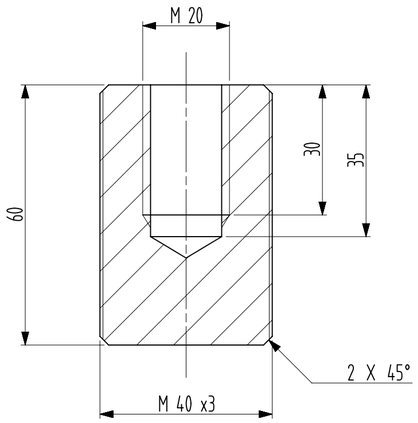
* Saldare i tubolari le piastre e i tappi a filo
* Non ci devono essere intercapedini
* Tutto Elettrolucidato

INFN Istituto Nazionale di Fisica Nucleare	INFN Milano - LASA via Fratelli Cervi, 201 20090 Segrate (MI)	Size: A1	DWG: DWG1-ASSY-Carrello-CB ESS-CB-01.03.02 Revision: 0
		Drawn by: M. Bonezzi	Date: 2016/03/23 Sheet 3
Experience: ESS		Checked by:	Scale: 1:5-1:2-1:1
Object: Carrello-CB		Approved by: P. Michelato	Units: mm
3D part: ASSY-Carrello-CB		File name: R:/Project/HPRJ/Carrello-CB/DWG1-Carrello-CB.prt	

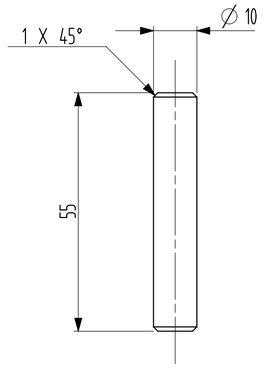
GENERAL TOLERANCES	-30	30-120	120-315	315-1.000	1.000-2.000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6°-30°	30°-120°	120°-
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			

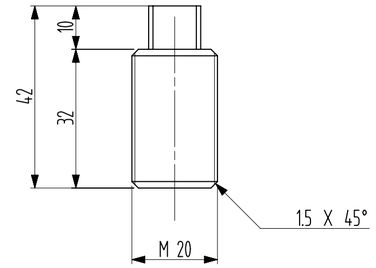


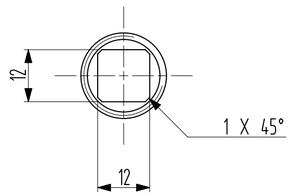
SECTION D-D

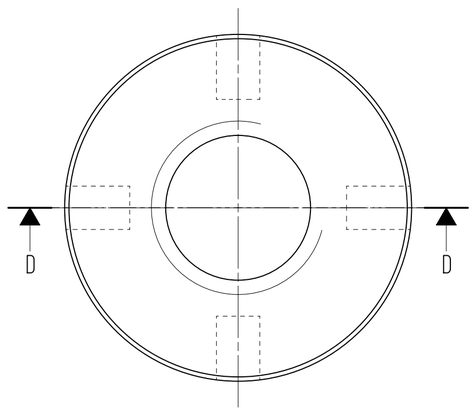


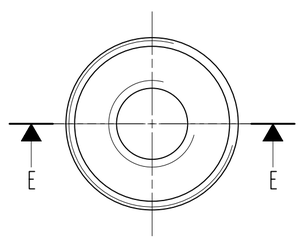
SECTION E-E





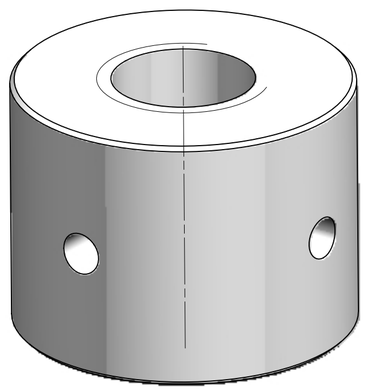


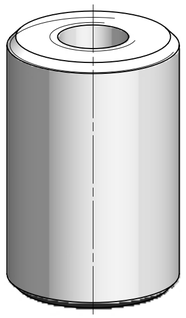




* Elettrolucidato

* Elettrolucidato





1

2

3

1.6

4

Smussi non indicati 0.3x45°

Pos.	Part Name	Qty	Material	Drawing	Note	Weight
4	Carrello-CB-MT-Perno	3	AISI-304			87
3	Carrello-CB-MT-Razza	12	AISI-304			34
2	Carrello-CB-MT-Vite	3	Teflon			79
1	Carrello-CB-MT-Madrevite	3	Teflon			293

INFN Istituto Nazionale di Fisica Nucleare
INFN Milano - LASA
via Fratelli Cervi, 201
20090 Segrate (MI)

Size: A2	DWG: DWG1-ASSY-Carrello-CB		Revision: 0
Drawn by: M. Bonezzi		Date: 2016/03/24	Sheet 4
Experience: ESS	Checked by:	Scale: 1 : 1	
Object: Carrello-CB	Approved by: P. Michelato	Units: mm	
3D part: ASSY-Carrello-CB	File name: R:/Project/HPR/Carrello-CB/DWG1-Carrello-CB.prt		

Sistema carrello di movimentazione cavità in capannone

Si richiede la quotazione per la realizzazione delle parti di seguito descritte

Dis. N°

ESS-TOOLING-01.00.00 (Complessivo)

ESS-TOOLING-01.00.01 (Particolari tutti)

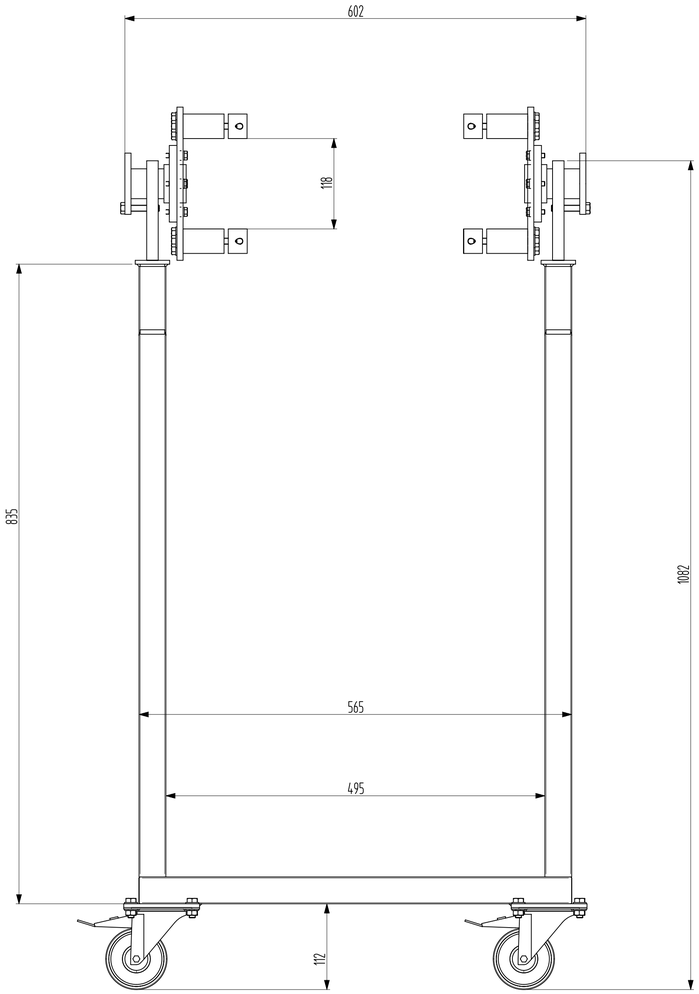
La fornitura deve comprendere anche le parti unificate indicate in tabella tutte (viti, rondelle, dadi ecc.)

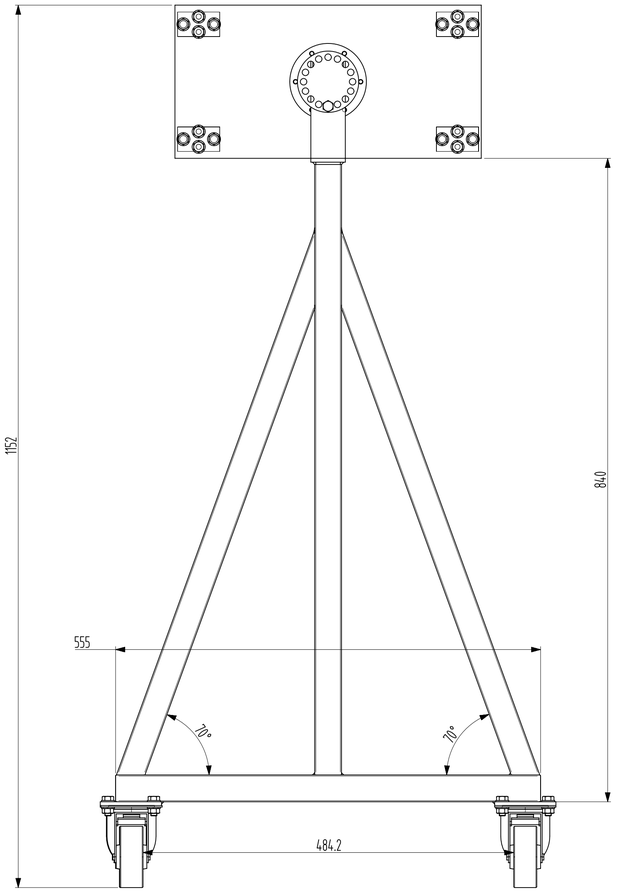
Descrizione:

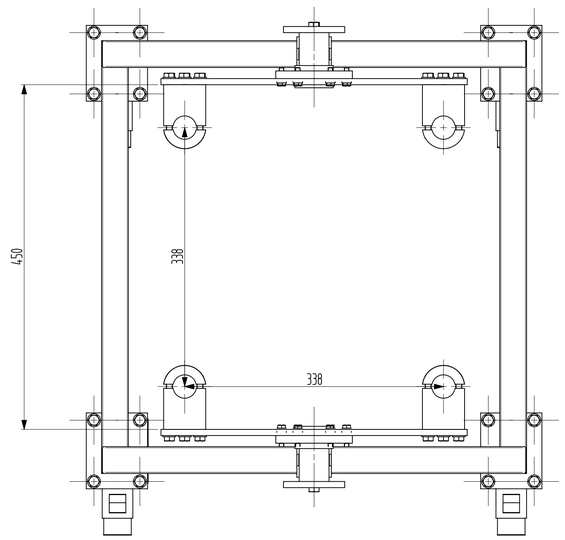
Carrello composto da tubolari in AISI saldati

Piastre morsetti perni in AISI Elettrolucidati

GENERAL TOLERANCES	-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6° -30°	30° -120°	120° -
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			





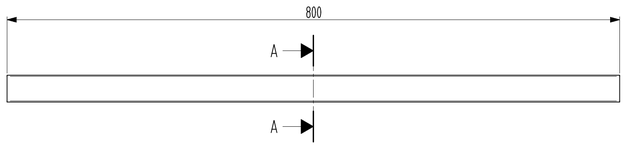


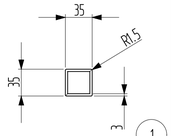
*Saldare tutto a filo
*Non ci devono essere intercapedini

Pos.	Part Name	Qty	Material	Drawing	Note	Weight
18	Hervieu-ep3bd080-281	4				
17	Washer 8,4x17x1,6-UNI-6592	64	A2			0
16	M8, - UNI 5588	16	A2			6
15	Washer 6,4x12,5x1,6 UNI -6592	12	A2			0
14	M6x20-UNI-5627	12	A4			0
13	M8x80-UNI-5627	16	A4			0
12	M8x45-UNI-5627	2	A4			0
11	M8x20-UNI-5627	32	A4			0
10	Aggancio-Piastra	2	AISI-304			541
9	Piastra-Attacco-Ruote	4	AISI-304			303
8	Attacco-Tipo-2	8	AISI-304			180
7	Piastra-inversione	2	AISI-304			
6	Perno-di-Inversione	2	AISI-304			1572
5	Attacco-Tipo-1	8	AISI-304			
4	Tubolare-35x35x555	2	AISI-304			1570
3	Tubolare-35x35x565	2	AISI-304			1600
2	Tubolare-35x35x800	2	AISI-304			2415
1	Tubolare-35x35x757	4	AISI-304			2121

INFN Istituto Nazionale di Fisica Nucleare — INFN Milano - LASA, via Fratelli Cervi, 201, 20090 Segrate (MI)	Size: A1	DWG: DWG-Sostegno-Verticale-Cavità: ESS-TOOLING-01.00.00	Revision: 0
	Drawn by: M. Chiodini	Date: 2016/01/29	Sheet 1 of 1
Experience: ESS	Checked by:	Scale: 1 : 4	
Object: TOOLING-CB-BP	Approved by: P. Michelato	Units: mm	
3D part: ASSY-Supporto-Verticale	File name: R:\Projects\ESS\AT-Tooling\Tooling-CB		

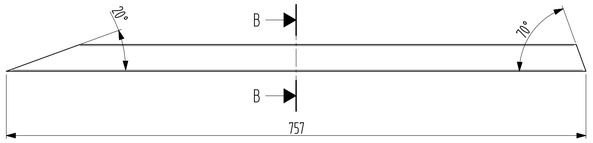
GENERAL TOLERANCES	-30	30-120	120-315	315-1.000	1.000-2.000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6°-30°	30°-120°	120°-
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			

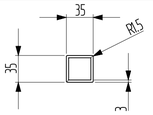




SECTION A-A

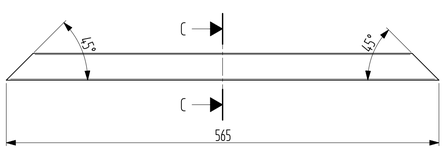
1

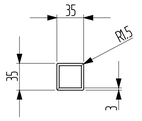




SECTION B-B

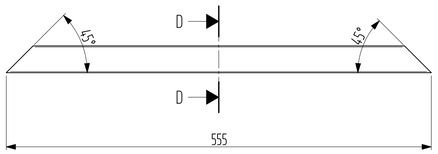
2

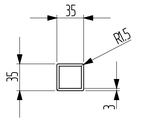




SECTION C-C

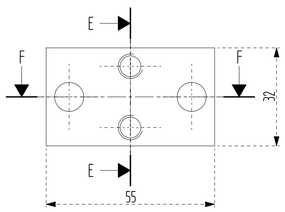
3

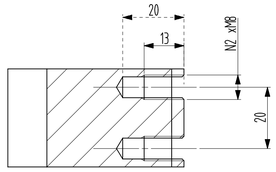




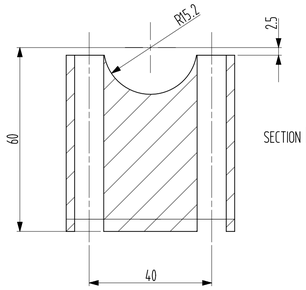
SECTION D-D

4

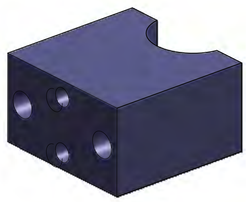




SECTION E-E

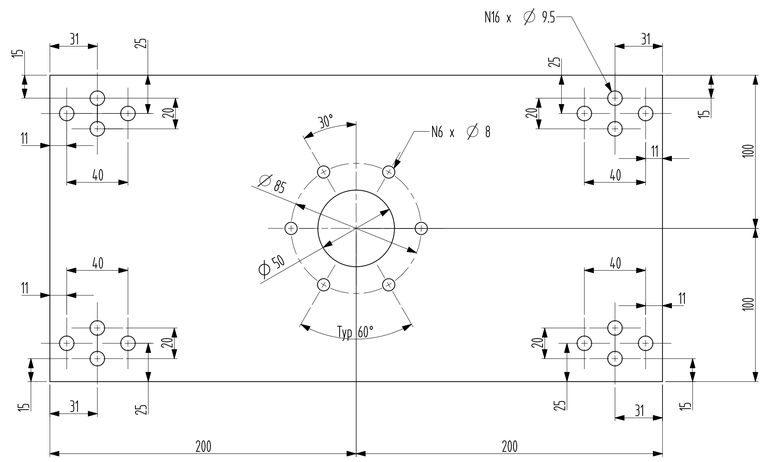


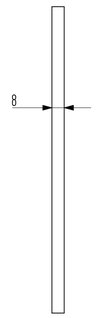
SECTION F-F



DA ELETTROLUCIDARE

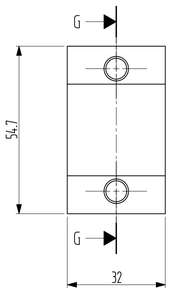
5

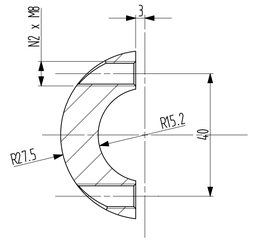




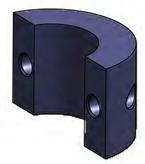
DA ELETTROLUCIDARE

7



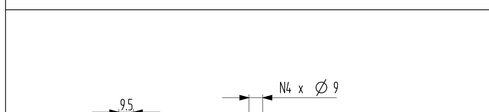


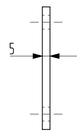
SECTION G-G

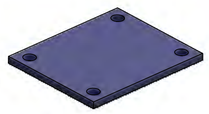


DA ELETTROLUCIDARE

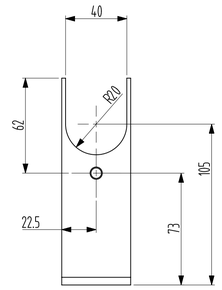
8

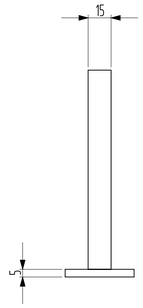


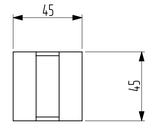




9



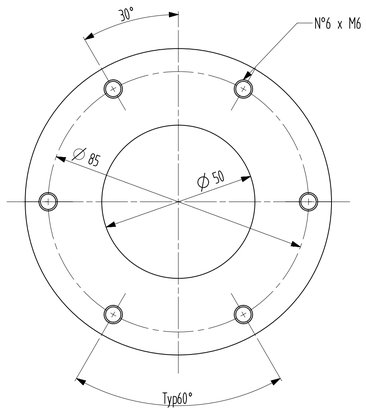


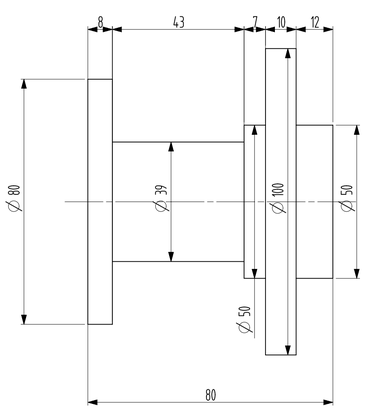


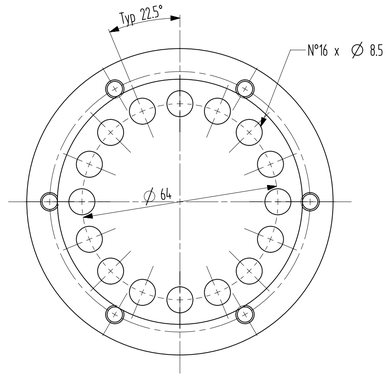
10

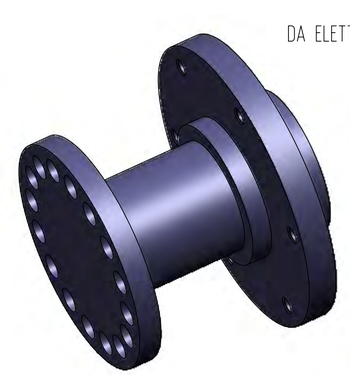
1.6

Smussi non indicati 0.3x45°









DA ELETTROLUCIDARE

6

Pos.	Part Name	Qty	Material	Drawing	Note	Weight
10	Aggancio-Piastra	2	AISI-304			54.1
9	Piastra-Attacco-Ruote	4	AISI-304			303
8	Attacco-Tipo-2	8	AISI-304		Da Elettrolucidare	180
7	Piastra-inversione	2	AISI-304		Da Elettrolucidare	
6	Perno-di-Inversione	2	AISI-304		Da Elettrolucidare	1572
5	Attacco-Tipo-1	8	AISI-304		Da Elettrolucidare	
4	Tubolare-35x35x555	2	AISI-304			1570
3	Tubolare-35x35x565	2	AISI-304			1600
2	Tubolare-35x35x757	4	AISI-304			2121
1	Tubolare-35x35x800	2	AISI-304			2415

INFN Istituto Nazionale di Fisica Nucleare

INFN Milano - LASA
via Fratelli Cervi, 201
20090 Segrate (MI)

Size: A1	DWG: DWG-Sostegno-Verticale-Cavità		Revision: 0
	ESS-TOOLING-01.00.01		
Drawn by: M. Chiodini	Date: 2016/01/29		Sheet 1 of 1
Experience: ESS	Checked by:	Scale: 1:1-1:2-1:4	
Object: TOOLING-CB-BP	Approved by: P. Michelato	Units: mm	
3D part: ASSY-Supporto-Verticale	File name: R:\Projects\ESS\AT-Tooling\Tooling-CB\Sostegno-verticale		

Beadpull

Si richiede la quotazione per la realizzazione delle parti di seguito descritte

Dis. N°

ESS-TOOLING-02.00.00 (Assieme)

ESS-TOOLING-02.01.00 (Particolari tutti)

ESS-TOOLING-02.02.00 (Particolari tutti)

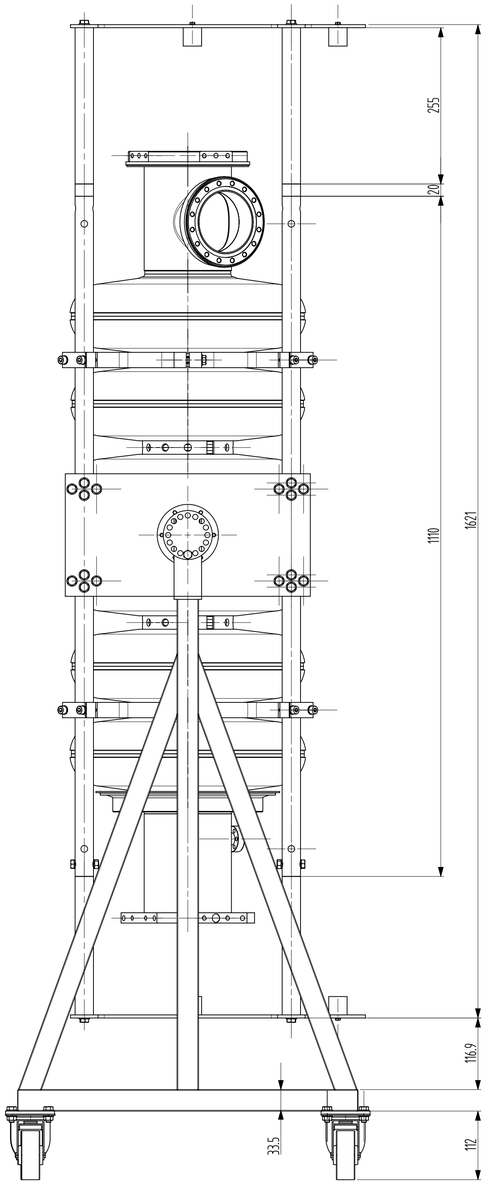
La fornitura deve comprendere anche le parti unificate indicate in tabella tutte (viti, rondelle, dadi ecc.)

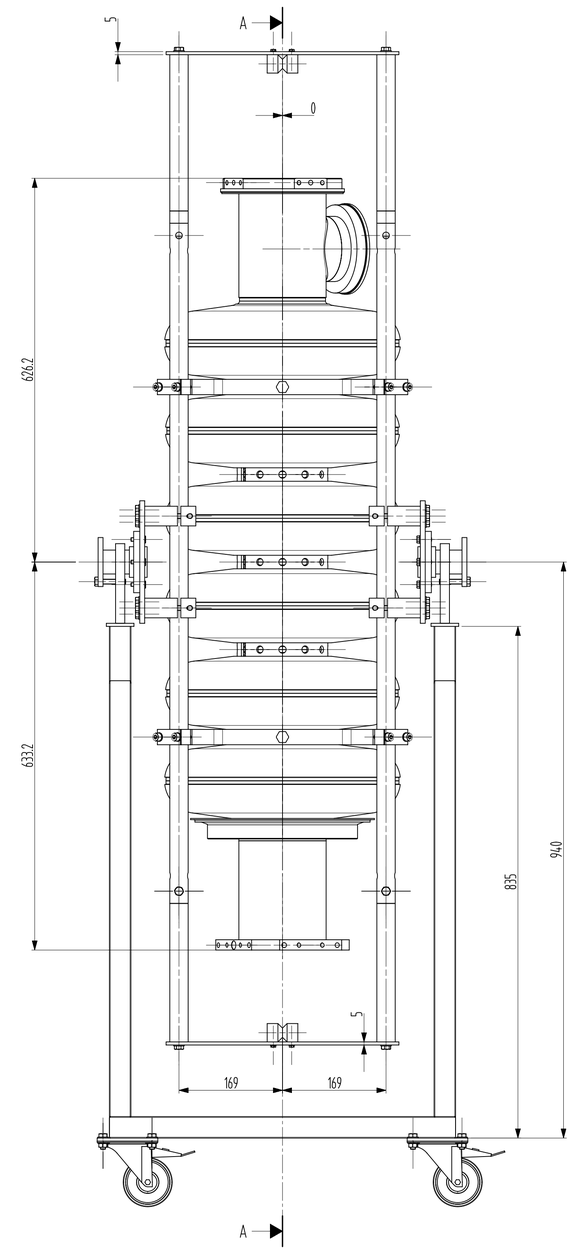
Descrizione:

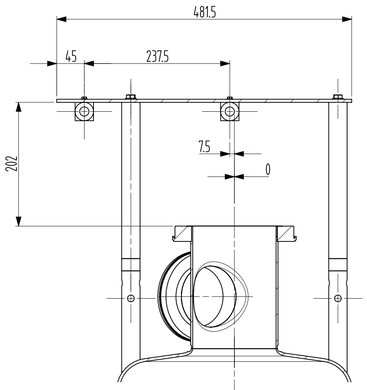
Piastre sagomate in AISI elettrolucidate

Tondi in AISI elettrolucidati

Spine lavorate e rotelle in teflon

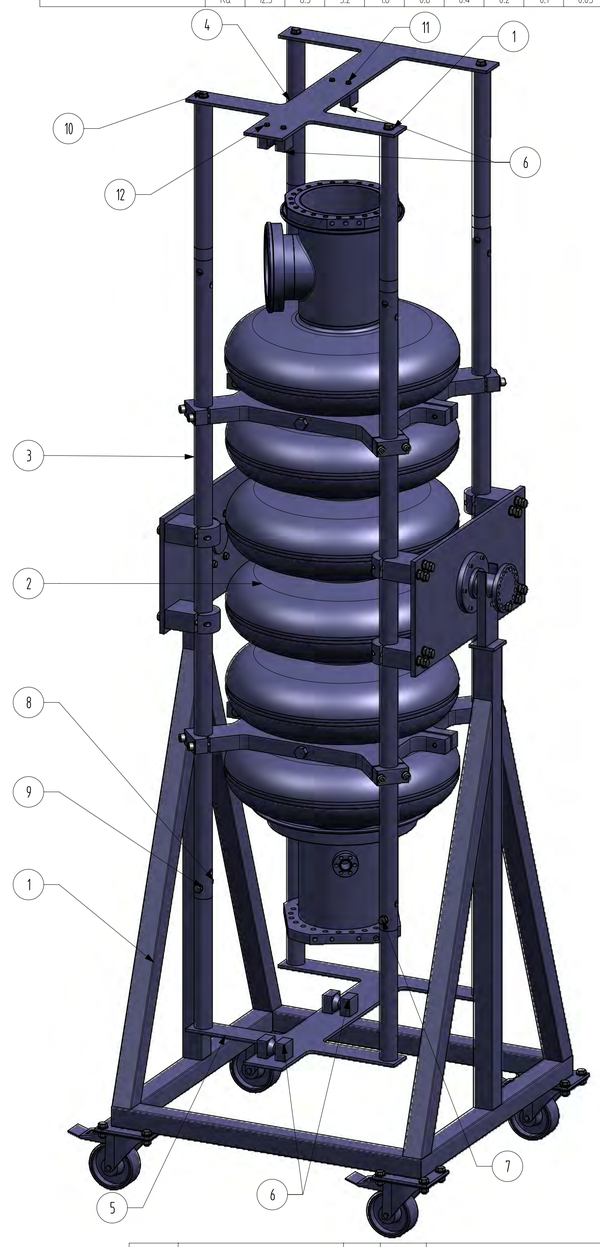


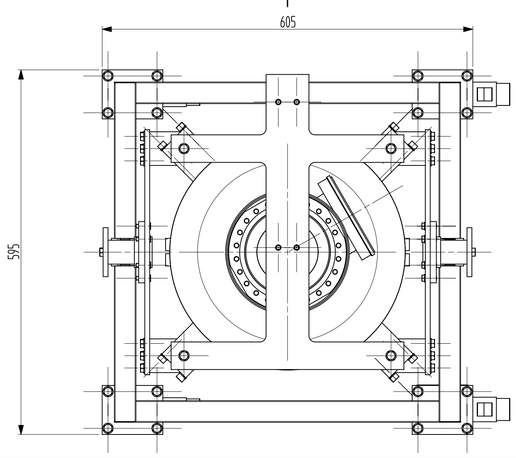




SECTION A-A

GENERAL TOLERANCES	-30	30-120	120-315	315-1000	1000-2.000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6° -30°	30° -120°	120° -
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			





Pos.	Part Name	Qty	Material	Drawing	Note	Weight
12	Washer 4,3x9 UNI-6592	8				
11	M4x20 UNI-5627	8				
10	M8x20 UNI-5627	8				
9	Washer 8,4x14 UNI-6592	16				
8	NUT M8 UNI-5627	4				
7	M8x40 UNI-5627	4				
6	Rotella Fissa	4		ESS-TOOLING-02.02.00		
5	Piastra Inferiore	1		ESS-TOOLING-02.01.00		
4	Piastra Superiore	1		ESS_TOOLING-02.01.00		
3	Telaio Cavità	1		ESS-AT-03.00.00/03.00.01		
2	Cavità MB	1		ESS-MB-01.00.00/01.01.00/01.02.00/01.02.01		
1	Supporto Verticale	1		ESS-TOOLING-01.00.00/01.00.01		

INFN Istituto Nazionale di Fisica Nucleare
INFN Milano - LASA
via Fratelli Cervi, 201
20090 Segrate (MI)

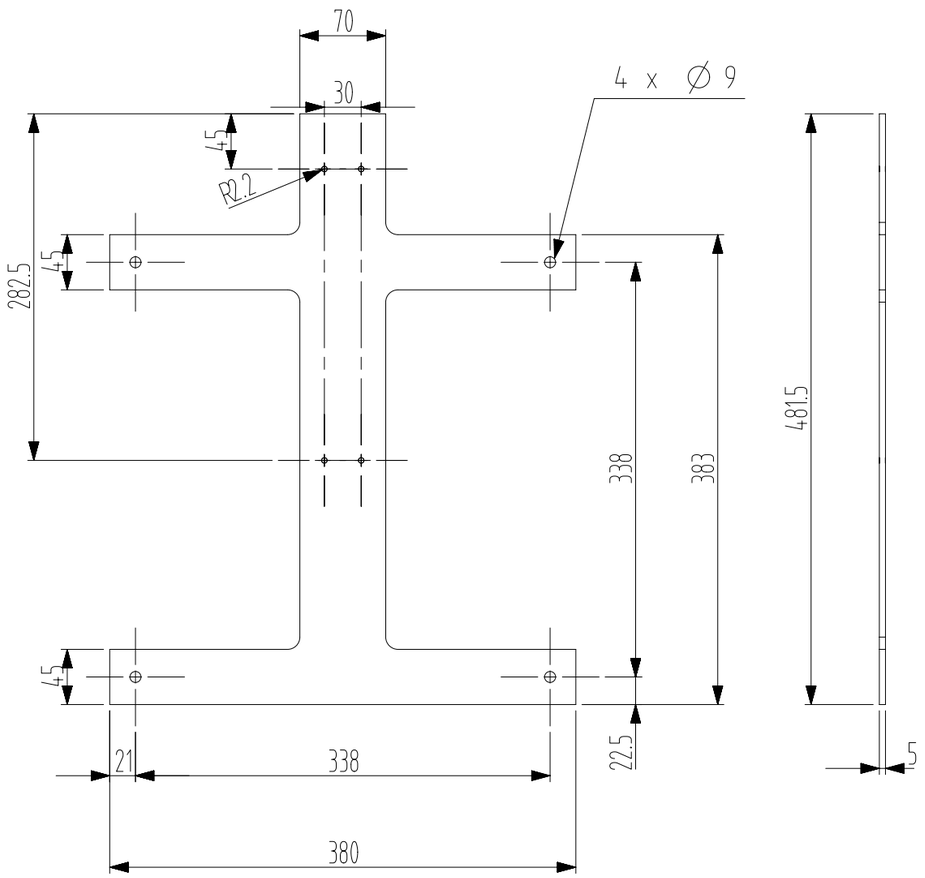
Size: A1 | DWG: DWG-Bead-Pull-Complessivo | ESS-TOOLING-02.00.00 | Revision: 0

Drawn by: M. Chiodini | Date: 2016/03/15 | Sheet 1 of 1

Experience: ESS | Checked by: | Scale: 1 : 5

Object: Bead-Pull | Approved by: P. Michelato | Units: mm

3D part: ASSY-Supporto-Verticale-Completo | File name: R:\Projects\ESS\AT-Tooling\Tooling-CB

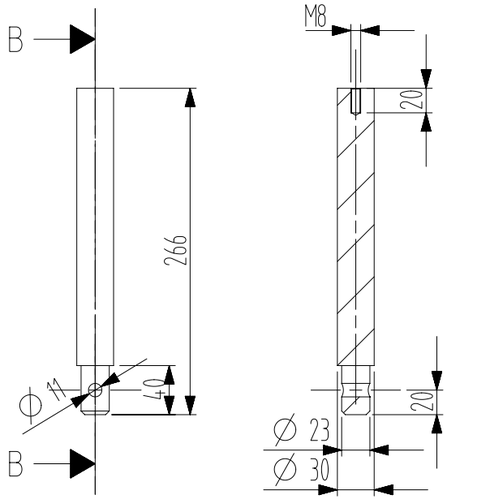


DA ELETTROLUCIDARE

1

GENERAL TOLERANCES	-30	30-120	120-315	315-1.000	1.000-2.000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6° -30°	30° -120°	120° -
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			

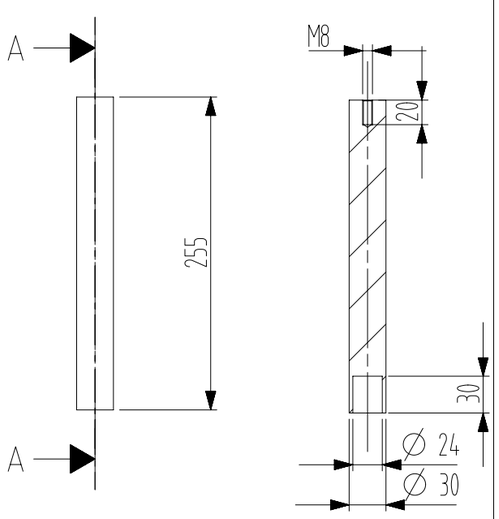
DA ELETTROLUCIDARE



SECTION B-B

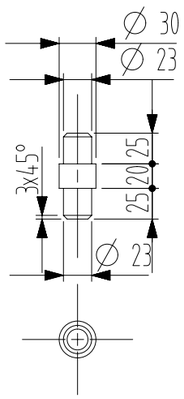
2

DA ELETTROLUCIDARE



SECTION A-A

3



4

Smussi non indicati 0.3x45°

Pos.	Part Name	Qty	Material	Drawing	Note	Weight
4	Adattatore Teflon	4	Teflon			
3	Tirante Superiore	4	AISI 304		DA ELETTROLUCIDARE	
2	Tirante Inferiore	4	AISI 304		DA ELETTROLUCIDARE	
1	Piastra	2	AISI 304		DA ELETTROLUCIDARE	

INFN Istituto Nazionale di Fisica Nucleare

INFN Milano - LASA
via Fratelli Cervi, 201
20090 Segrate (MI)

Size: A3

DWG: DWG-ASSY-Piastre

ESS-TOOLING-02.01.00

Revision: 0

Drawn by: L.Sagliano

Date: 2016/01/25

Sheet 1 of 1

Experience: ESS

Checked by:

Scale: 1 : 5

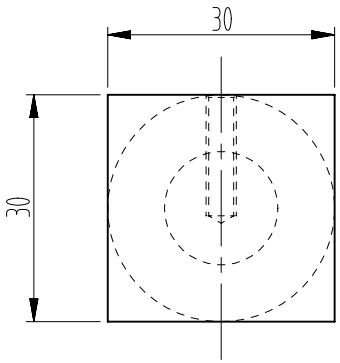
Object: Attrezzatura-Camera-Bianca

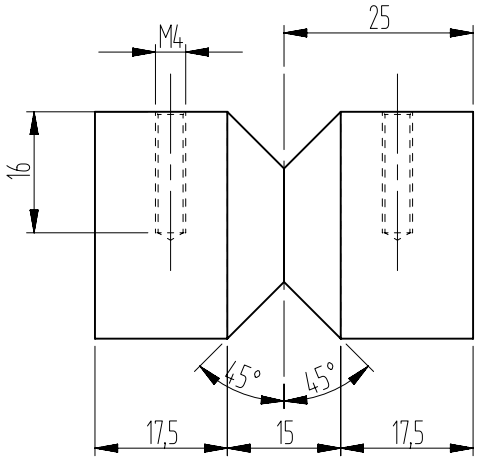
Approved by: P.Michelato

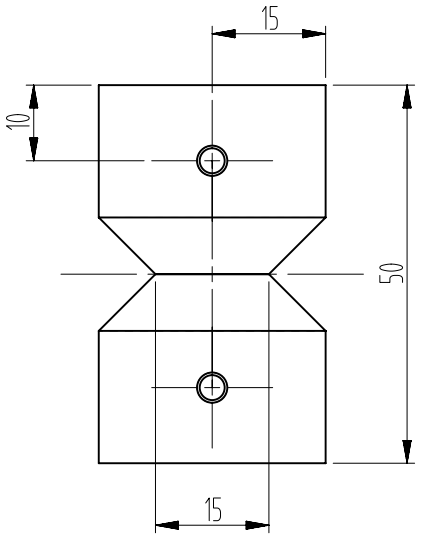
Units: mm

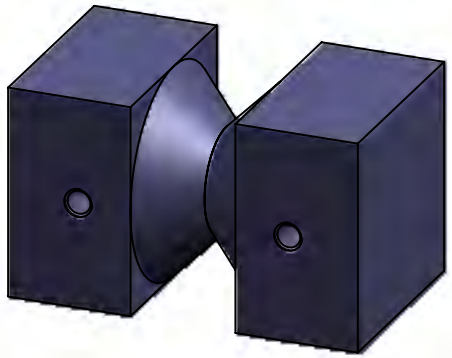
3D part: ASSY-PIASTRE

File name: R:\Projects\ESS\AT-Tooling\Tooling-CB\Sostegno-verticale









1.6

Smussi non indicati 0.3x45°

Pos.	Part Name	Qty	Material	Drawing	Note	Weight
1	Rotella-Fissa	4	Teflon			

INFN Istituto Nazionale di Fisica Nucleare	INFN Milano - LASA via Fratelli Cervi, 201 20090 Segrate (MI)	Size: A4	DWG: DWG-Blocco-rotella-fissa		Revision: 0
		Drawn by:	L.Sagliano	Date: 2016/02/09	
Experience: **ESS**		Checked by:		Scale: 1 : 1	
Object: **Bead-Pull**		Approved by:	P.Michelato	Units: mm	
3D part: **Blocco-rotella-fissa**		File name:	R:\Projects\ESS\AT-Tooling\Tooling-CB\Ruote		

Sistema di aggancio cavità al carro ponte

Si richiede la quotazione per la realizzazione delle parti di seguito descritte

Dis. N°

ESS-TOOLING-03.00.00 (Complessivo)

ESS-TOOLING-03.00.01 (Particolari tutti)

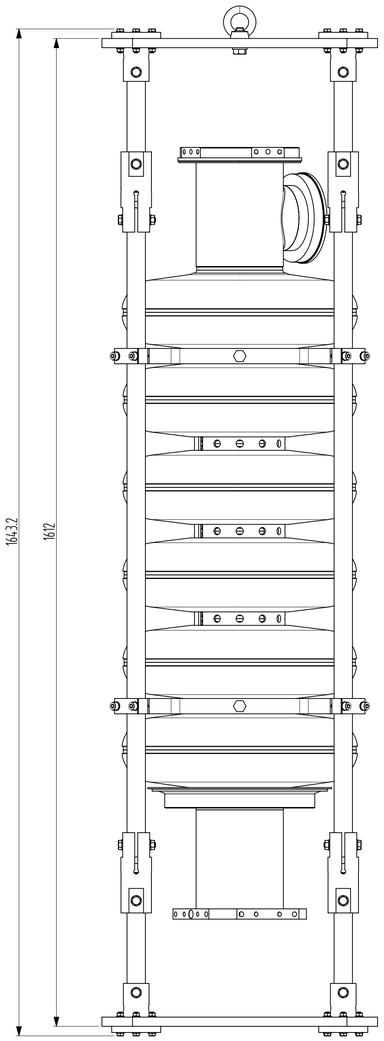
ESS-TOOLING-03.00.02 (Particolari tutti)

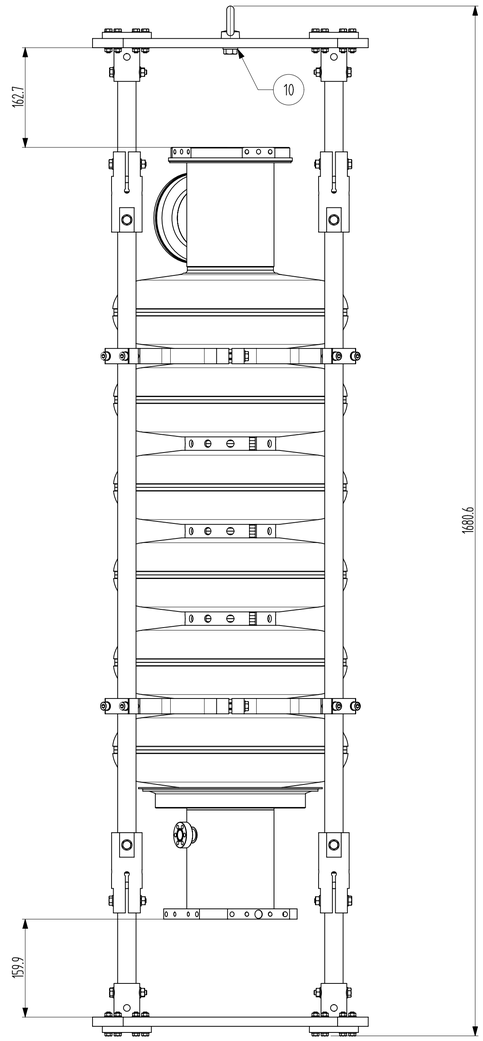
La fornitura deve comprendere anche le parti unificate indicate in tabella tutti (viti, rondelle, dadi ecc.)

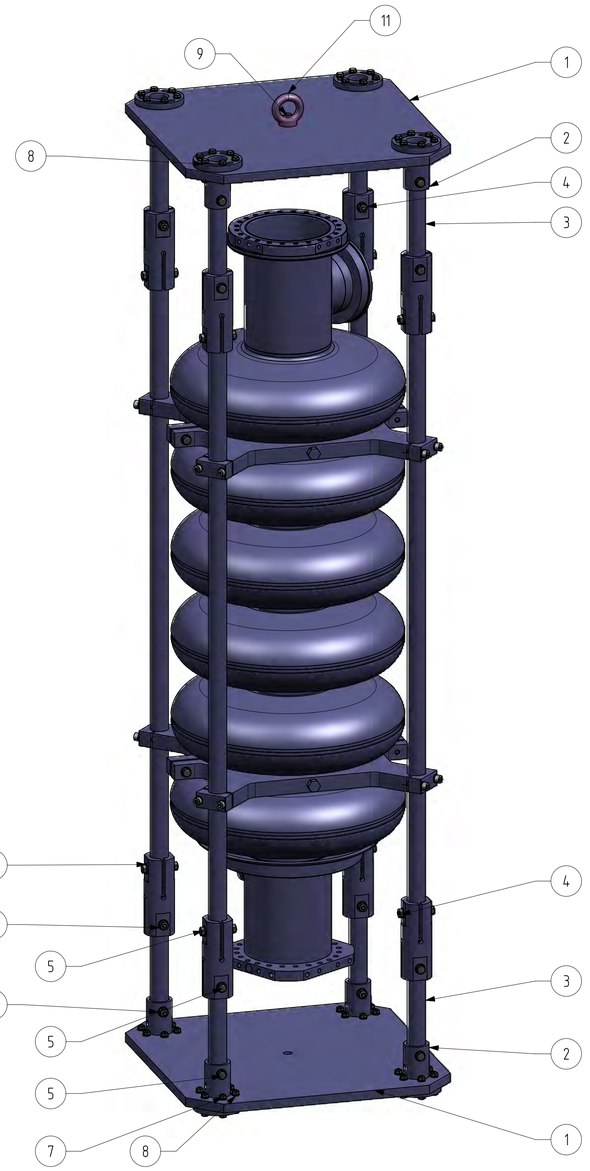
Descrizione:

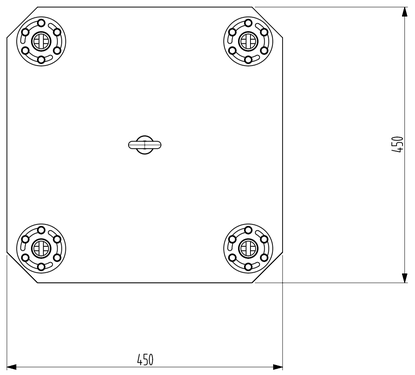
Piastre tubi e canotti saldati in AISI

GENERAL TOLERANCES	-30	30-120	120-315	315-1000	1000-2.000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6° -30°	30° -120°	120° -
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N-LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			









Pos.	Part Name	Qty	Material	Drawing	Note	Weight
11	EMILE-MAURINE 18-018-12	1				
10	Washer 13x24x2.5 UNI-6592	1				
9	UNI 5627-M12x1.75x35	1				
8	Washer-6.4x12.5x1.6-UNI-6592	96				
7	Dado-M6-UNI-5588	48				
6	Washer-8.4x17x1.6-uni-6592	48				
5	M8x55-UNI 5627	24				
4	Dado-M8-UNI 5588	24				
3	Tubo	8	AISI 304			
2	Canotto	8	AISI 304			
1	Piastra Sollevamento	2	AISI 304			

INFN Istituto Nazionale di Fisica Nucleare

INFN Milano - LASA
via Fratelli Cervi, 201
20090 Segrate (MI)

Size: A1

DWG: DWG-ASSY-Movimentazione-Cavit

ESS-TOOLING-03.00.00

Revision: 0

Drawn by: L.Sagliano

Date: 2016/03/17

Sheet 1 of 1

Experience: ESS

Checked by:

Scale: 1 : 5

Object: Aggancio Carroponte

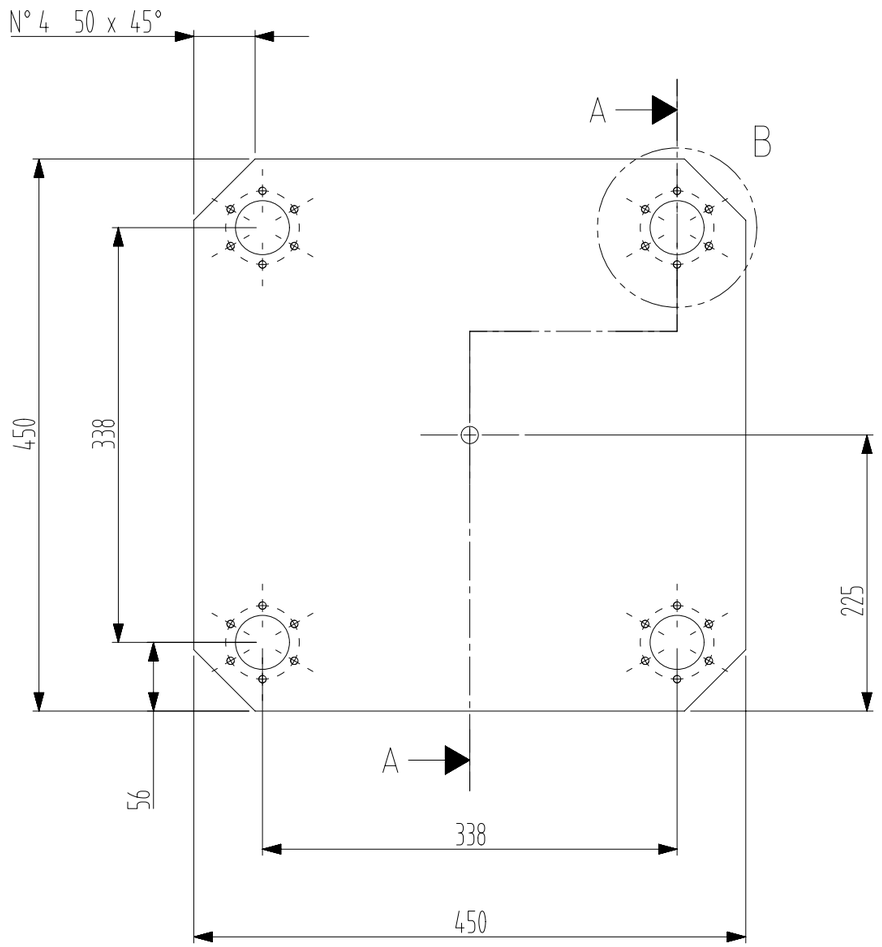
Approved by: P.Michelato

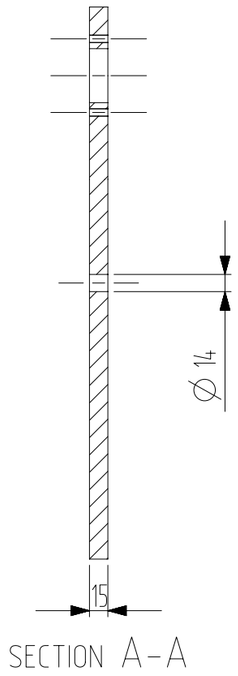
Units: mm

3D part: ASSY-Movimentazione-Cavit

File name: R:\Projects\ESS\AT-Tooling\Tooling-CB\Movimentazione cavit

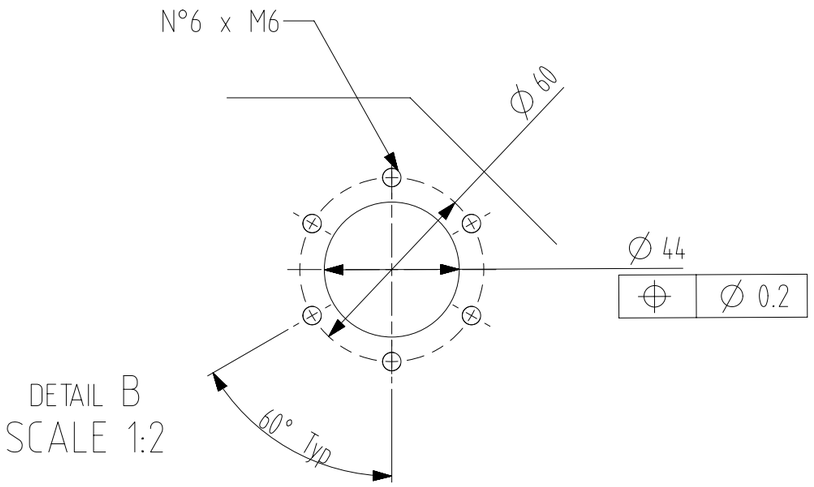
GENERAL TOLERANCES	-30	30-120	120-315	315-1.000	1.000-2.000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6°-30°	30°-120°	120°-
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			





SECTION A-A

1.6



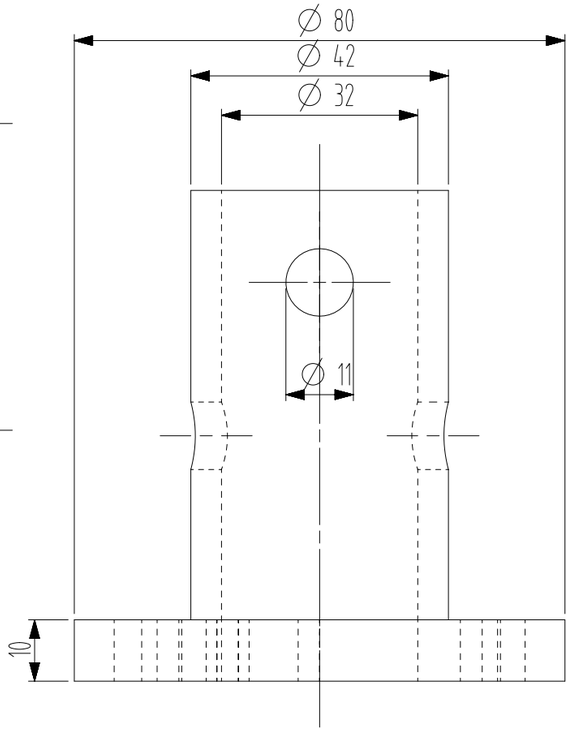
DETAIL B
SCALE 1:2

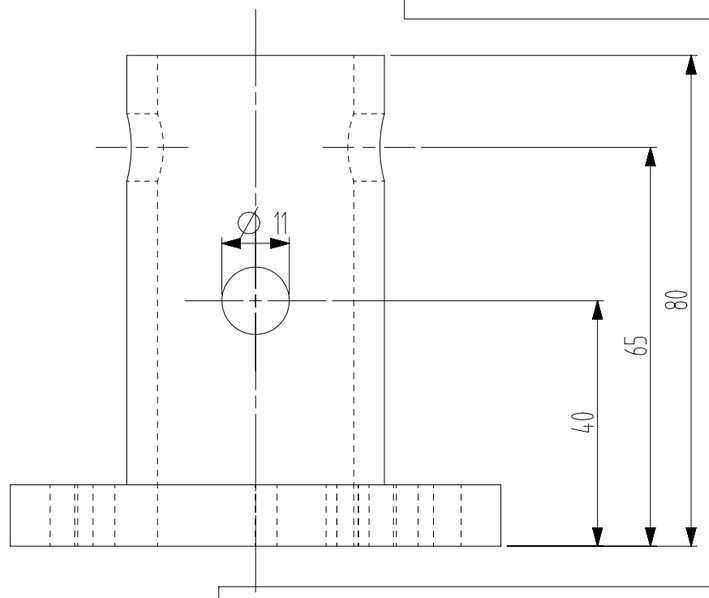
Smussi non indicati 0.3x45°

1	Piastra Sollevamento	2	AISI 304			22664
Pos.	Part Name	Qty	Material	Drawing	Note	Weight

INFN Istituto Nazionale di Fisica Nucleare	INFN Milano - LASA via Fratelli Cervi, 201 20090 Segrate (MI)	Size: A3	DWG: DWG-Piastra-Sollevamento ESS-TOOLING-03.00.01	Revision: 0
		Drawn by: M. Chiodini	Date: 2016/03/17	Sheet 1 of 1
Experience: ESS		Checked by:	Scale: 1 :5	
Object: Aggancio Carroponte		Approved by: P. Michelato	Units: mm	
3D part: Piastra-Carroponte		File name: R:\Projects\ESS\AT-Tooling\Tooling-CB\Movimentazione cavit		

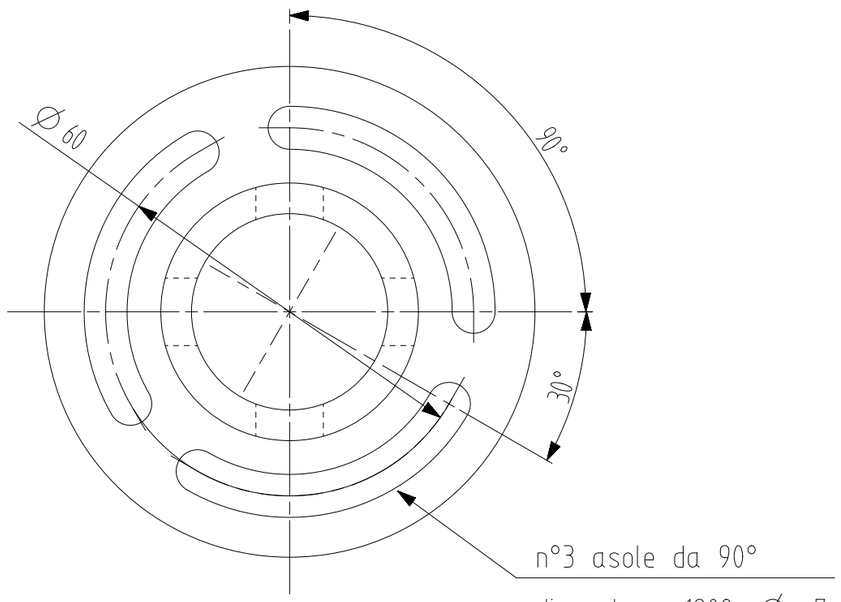
GENERAL TOLERANCES	-30	30-120	120-315	315-1.000	1.000-2.000	2000-4000	4000-8000	8000-12000	12000-16000	16000-20000	20000-		
FOR PLATES WORKING	± 1	± 2	± 2	± 3	± 4	± 6	± 8	± 10	± 12	± 14	± 16		
FOR MECHANICAL MACHINING OF SIZE WITHOUT CLEREANCE	-6	6-30	30-120	120-315	315-1000	1000-2000	2000-4000	4000-	ANG. DIM.	-6°	6°-30°	30°-120°	120°-
TOLERANCES NOT SPECIFIED	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8	± 1.2	± 2	± 3		± 1°	± 30'	± 20'	± 10'
WORKING SURFACES ROUGHNESS	ISO	N 10	N 9	N 8	N 7	N 6	N 5	N 4	N 3	N 2			
	N LCA	18	17	16	15	14	13	12	11	10			
	Ra	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05			

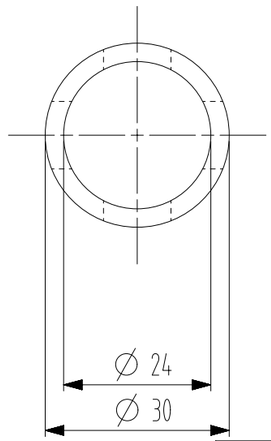


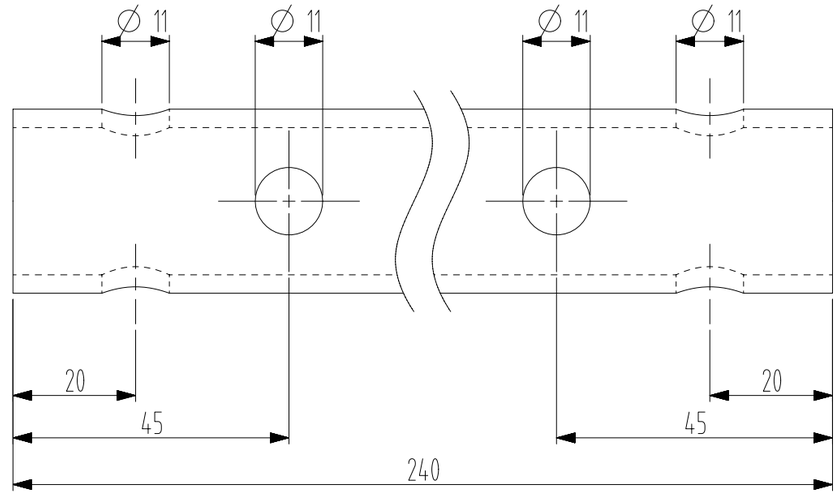


1.6

Smussi non indicati 0.3x45°







Pos.	Part Name	Qty	Material	Drawing	Note	Weight
3	Tubo	8	AISI 304			
2	Canotto	8	AISI 304			

INFN Istituto Nazionale di Fisica Nucleare	INFN Milano - LASA via Fratelli Cervi, 201 20090 Segrate (MI)	Size: A3	DWG: DWG-Canotto-Tubo ESS-TOOLING-03.00.02
		Revision: 0	
	Drawn by: L.Sagliano	Date: 2016/03/17	Sheet 1 of 1
Experience: ESS	Checked by:	Scale: 1 : 1	
Object: Aggancio-Carroponte	Approved by: P.Michelato	Units: mm	
3D part: Canotto-Tubo	File name: R:\Projects\ESS\AT-Tooling\Tooling-CB\Movimentazione cavit		